AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1. (Currently amended) A device ~~Device~~ for the dynamic measurement of an object's relative position, with respect to a mobile reference system, of the type ~~consisting of~~ comprising at least one articulated arm that connects the reference system with the object whose coordinates and relative position are to be determined, ~~characterised in that it comprises~~ the device comprising an articulated mechanical arm (16) with five degrees of freedom with five angular positioned sensors (31, 32, 33, 34 and 35), which allow ~~the~~ measurement of the three spatial coordinates X, Y, and Z of a point on the object to be measured and ~~the~~ two inclination angles ~~(α (convergence) and γ (descent))~~ that define a plane of symmetry for the object with respect to a reference point.

Claim 2. (Currently amended) A device ~~Device~~ according to claim 1, ~~characterised in that~~ wherein the articulated arm (16) with five degrees of freedom comprises: a rotational joint (21) about an imaginary axis (1), connecting the reference point (10) and the articulated arm (16) via a working part (11); three rotational joints (22, 23 and 24) about 3 parallel, imaginary axes (2, 3 and 4) respectively, with the same direction that connect the working parts (11, 12, 13 and 14); and another rotational joint (25) about an imaginary axis (5) connecting the working parts (14~~) and (~~ 15) of the articulated arm.

Claim 3. (Currently amended) A device ~~Device~~ according to Claims 1 ~~and~~ or 2, ~~characterised in that~~ wherein the sensors (31, 32, 33, 34 and 35)~~,~~ in each of the rotational joints are respective optical angular position sensors.

Claim 4. (Currently amended) A device ~~Device~~ according to Claims 1 ~~and~~ or 2, ~~characterised in that~~ wherein said device is adapted to be installed on a vehicle (8), so that the reference point (10) consists of a fixing device (9) adapted for coupling to a fixed point on ~~a~~ the vehicle, and wherein ~~in that~~ the working part (15) of the articulated arm (16) comprises an adaptor (17) connected via a rotational axle (6) that can be coupled to one of the vehicle's wheels (7) so that the dynamic measurement device determines the relative position of a wheel with respect to a fixed point on the vehicle and allows the study of the dynamic behavior ~~behaviour~~ of ~~the~~ running gear in different driving conditions.

Claim 5. (canceled).

Claim 6. (Currently amended) A device ~~Device~~ according to Claim 3, ~~characterised in~~ wherein that said device is adapted to be installed on a vehicle (8), so that the reference point (10) consists of a fixing device (9) adapted for coupling to a fixed point on ~~a~~ the vehicle, and wherein ~~in that~~ the working part (15) of the articulated arm (16) comprises an adaptor (17) connected via a rotational axle (6) that can be coupled to one of the vehicle's wheels (7) so that the dynamic measurement

device determines the relative position of a wheel with respect to a fixed point on the vehicle and allows the study of the dynamic ~~behaviour~~ behavior of the running gear in different driving conditions.

Claim 7. (new) A process for determining the dynamic behavior of a passenger vehicle based on measurement of the relative position of the vehicle wheels, comprising measuring the relative position of the wheels with at least one device according to Claim 1, wherein each device is coupled to at least one of the vehicle's wheels, respectively.